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Anamorphic Attachment

for

High Power Stereoviewer

[redacted]

INSTRUCTION MANUAL

STAT

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STAT

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STAT

1.0 Introduction and General Description

STAT The [ ] Anamorphic Attachment has been designed and fabricated specifically for use with the [ ] High Power Stereoviewer STAT (HPSV). (To avoid clumsy wording when referring to the attaching of the Anamorphic Attachment we will call it the unit.) The attachment of the unit to the HPSV provides the capability of changing the magnification along one axis of the field. The anamorphic is continuously variable from 1.0X (normal field) to 2.2X and may be introduced along any direction in the field.

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2.0 Controls

Figure 2-1 is a photograph of the unit with callouts to the controls. The controls and their functions are as follows:

Anamorphic Magnification - Rotation of this knurled ring varies the anamorphic magnification. The magnification range is continuously variable from 1.0X to 2.2X. The scale indicating the anamorphic magnification is graduated in 0.1 magnification units.

Two sets of numbers are engraved on the scale. This is to insure that at least one of the sets in visible after attachment to the HPSV.

Magnification Index Line - This index line indicates the value of the anamorphic magnification selected.

Anamorphic Rotation - Rotation of this knurled ring rotates the anamorphic prism cluster thereby rotating the plane of anamorphic relative to the field. The rotation is continuously variable from 0^{o} to 360^{o}.

Drag Adjustment - Rotation of this knurled ring permits adjustment of the drag, or friction, of the anamorphic rotation control. It may be tightened to lock the rotation ring.

Mounting Ring	- This knurled ring is used for threading the unit to the HPSV. It is the only surface which should be gripped when threading the unit to the HPSV.
Index Tab	- The tab is used to provide the reference position from which the amount of rotation of the plane of anamorphism is measured. The position of the tab is adjustable.
Index Tab Locking Ring	- Loosening this knurled ring enables free movement of the tab. Locking the ring locks the tab position.

3.0 Attaching the Unit to the HPSV

The method of attaching the unit to the HPSV is illustrated in Figures 3-1 through 3-5. Figure 3-1 is a photograph of the eyepiece section of the standard HPSV. The following steps describe the procedure:

A. Remove the eyepieces.

B. Loosen the two set screws on each of the eyepiece tubes. Unscrew the eyepiece tubes and set aside. Figure 3-2 illustrates this procedure with one of the eyepiece tubes removed.

C. Carefully insert the lower portion of the unit into the lower housing of the eyepiece tube, Figure 3-3. Grip only the mounting ring and thread the unit onto the HPSV. There is no need to use excessive force in tightening the unit to the HPSV.

D. Tighten the nylon set screws on the unit, Figure 3-4.

E. Insert the eyepieces.

F. Adjust the index tabs, Figure 3-5. A suggested position of the tabs is shown. The tab index locking control is loosened, the tab index rotated to the position indicated, (or another position if found more convenient), and the tab index locking control is tightened.

The units are now ready for use as part of the HPSV. Useage is described in Section 4.0.

Removal of the unit is accomplished by reversing the procedure for attaching.

4.0 Use of the Anamorphic Attachment

4.1 Rotation of the Plane of Anamorphism

Loosen the drag adjustment ring by rotating it clockwise (when viewed from the operator's position). Rotate the anamorphic rotation ring to orient the plane of anamorphism. The drag adjustment may now be tightened by counterclockwise rotation. The angular reading may be noted by its location relative to the index tab.

4.2 Adjustment of Anamorphic Magnification

Rotate the Anamorphic magnification control ring clockwise to increase the magnification and counterclockwise to decrease the magnification. The value of the anamorphic magnification is given by the value opposite the magnification index line.

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5.0 Care and Maintenance

The Anamorphic Attachment is a well designed precision optical instrument. It must be handled accordingly.

Routine maintenance should consist only in cleaning the exposed optical surfaces. The procedure is:

1. Apply lens cleaning solution to a cotton swab and wipe the surface.
2. Remove the lens cleaning solution from the surface using a clean, dry, cotton swab.

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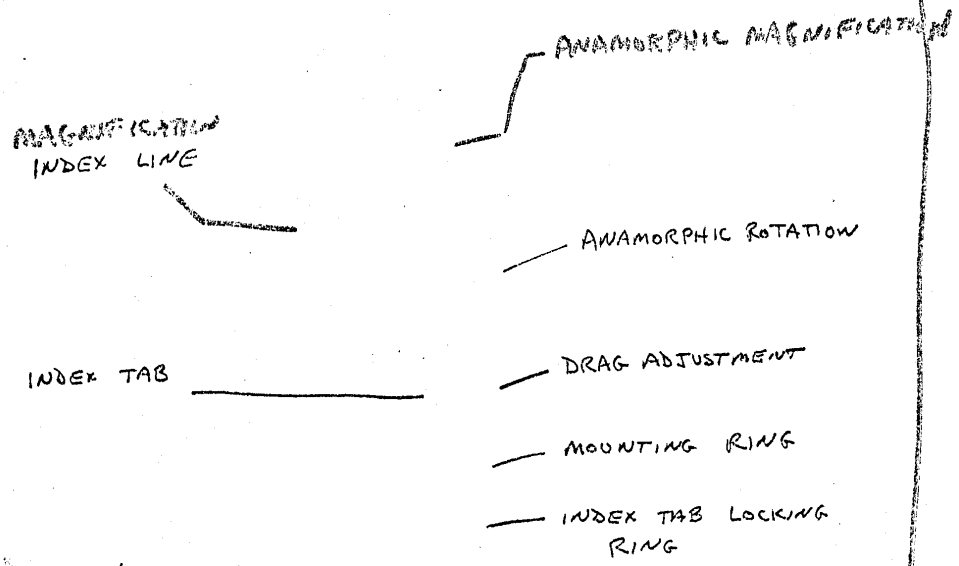

FIGURE 2-1 ANAMORPHIC ATTACHMENT WITH CALLOUTS OF CONTROLS

ANAMORPHIC ATTACHMENT

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